IN THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 19, with the following rewritten paragraph:

As an example, a module used for compensating an optical fiber that is optimized for a low dispersion operation in a wavelength range from 1290 to 1330 nanometers is configured with one kind of optical fiber having dispersion of -65.5 ps/nm/km at a wavelength of 1550 nanometers (see ~~Patent Literature 1).~~

Please delete the paragraph beginning at page 1, line 24, in its entirety:

~~Patent Literature 1:~~

Please replace the paragraph beginning at page 2, line 12, with the following rewritten paragraph:

Moreover, when plural wavelength bands, for example, the C-band and the L-band, are used together, it is difficult to compensate for the whole wavelength band by using a dispersion-compensating module configured with one kind of optical fiber at the same time ~~can not solve the purpose~~. In such cases, first the signal light is separated into signals of each wavelength band, and each signal is compensated individually. However, this configuration makes the optical transmission system more complicated.

Please replace the paragraphs beginning at page 3, line 6, through page 5, line 10 with the following rewritten paragraphs:

~~It is an object of the present invention to provide a dispersion compensating module that suppresses a variance in a cumulative wavelength dispersion in a transmission line after a dispersion compensating, thereby to realize a dispersion compensating in a high-speed WDM~~

~~transmission line.~~

~~It is another object of the present invention to provide an optical transmission system using a dispersion compensating module that suppresses a variance in a cumulative wavelength dispersion in a transmission line after a dispersion compensating, thereby to realize a dispersion compensating in a high-speed WDM transmission line.~~

~~The dispersion compensating module according to the present invention has at least two dispersion compensating fibers to compensate for a dispersion and a dispersion slope accumulated in a transmission optical fiber in a predetermined signal wavelength band. The dispersion compensating module comprises a first dispersion compensating fiber having a negative dispersion value and a negative dispersion slope, a second dispersion compensating fiber having a negative dispersion value and a negative dispersion slope different from the negative dispersion value and the negative dispersion slope that the first dispersion compensating fiber has, and a jointing unit that serially joints between the first dispersion compensating fiber and the second dispersion compensating fiber. The predetermined signal wavelength band is an optional signal wavelength band including at least 1530 to 1625 nanometers. The negative dispersion slope that the first dispersion compensating fiber presents a change convex to the upward direction following a wavelength change, and the negative dispersion slope that the second dispersion compensating fiber presents a change convex to the downward direction following a wavelength change.~~

~~According to the present invention, the jointing unit serially joints between the first dispersion compensating fiber and the second dispersion compensating fiber, the first dispersion compensating fiber having a negative dispersion value and a negative dispersion slope, and the second dispersion compensating fiber having a negative dispersion value and a negative dispersion slope different from the negative dispersion value and the negative dispersion slope that the first dispersion compensating fiber has. In an optional signal~~

~~wavelength band including at least 1530 to 1625 nanometers, the dispersion slope that the first dispersion compensating fiber presents a change convex to the upward direction following a wavelength change, and the dispersion slope that the second dispersion compensating fiber presents a change convex to the downward direction following a wavelength change. Therefore, according to the present invention, it is possible to securely compensate for a cumulative dispersion and a cumulative dispersion slope in the WDM transmission line. Further, a variance in the cumulative wavelength dispersion value in the transmission line after the dispersion compensating can be suppressed. Furthermore, a cumulative dispersion and a cumulative dispersion slope in the WDM transmission of an optional signal wavelength band including at least 1530 to 1625 nanometers can be securely compensated for.~~

~~Further, the optical transmission system according to the present invention has at least the dispersion compensating module according to the present invention.~~

~~According to the present invention, an optical transmission system suitable for a high-speed WDM transmission can be realized.~~

It is an object of the present invention to solve at least the problems in the conventional technology.

A dispersion-compensating module according to one aspect of the present invention is used for compensating cumulative dispersion and dispersion slope of a transmission optical fiber in a predetermined signal wavelength band including at least 1530 to 1625 nanometers. The dispersion-compensating module includes a first dispersion-compensating fiber having a negative first dispersion value and a negative first dispersion slope, wherein the first dispersion slope changes along an upwardly convex curve as the wavelength changes; a second dispersion-compensating fiber having a negative second dispersion value and a negative second dispersion slope, the second dispersion value and the second dispersion slope

being different from the first dispersion value and the first dispersion slope respectively, wherein the second dispersion slope changes along a downwardly convex curve as the wavelength changes; and a jointing unit that serially joints the first dispersion-compensating fiber with the second dispersion compensating fiber.

The optical transmission system according to another aspect of the present invention employs the dispersion-compensating module according to the above-mentioned aspect.

The other objects, features and advantages of the present invention are specifically set forth in or will become apparent from the following detailed descriptions of the invention when read in conjunction with the accompanying drawings.

Please replace the paragraph beginning at page 6, line 1, with the following rewritten paragraph:

Fig. 5 is a graph of wavelength characteristics of dispersion and the variance in the wavelength characteristics of dispersion of the transmission optical fiber after dispersion compensation is performed using only the first dispersion-compensating fiber ~~that constitutes the dispersion compensating module according to the first embodiment~~;

Please delete the paragraph beginning at page 7, line 19:

~~(First Embodiment)~~

Please replace the paragraph beginning at page 7, line 20, with the following rewritten paragraph:

Fig. 1 illustrates a dispersion-compensating ~~fiber~~ module 10 according to a first embodiment of the present invention. This dispersion-compensating module 10 includes a

dispersion-compensating fiber 11, a dispersion-compensating fiber 12, a bobbin 14, a bobbin 15, and a jointing unit 13 for jointing one of the two ends of the fibers 11 and 12. The other end of the ~~dispersion-compensating module 10~~dispersion-compensating fiber 11 is serially linked to a transmission optical fiber 18 via a connector 16, and the other end of the ~~dispersion-compensating module 10~~dispersion-compensating fiber 12 is serially linked to the transmission optical fiber 18 via a connector 17.

Please replace the paragraph beginning at page 8, line 16, with the following rewritten paragraph:

~~The configuration of the jointing unit having the dispersion-compensating fiber 11 and the dispersion-compensating fiber 12 serially jointed by fusion will be explained in detail below with reference to Fig. 2.~~ Fig. 2 is a longitudinal cross-section of the jointing unit 13.

Please replace the paragraph beginning at page 9, line 10 with the following rewritten paragraph:

This dispersion-compensating module 20 includes the dispersion-compensating fiber 11, the dispersion-compensating fiber 12, a bobbin 21, and the jointing unit 13 for jointing one of the two ends of the fibers 11 and 12. The other end of the ~~dispersion-compensating module 20~~dispersion-compensating fiber 11 is serially linked to the transmission optical fiber 18 via the connector 16, and the other end of the ~~dispersion-compensating module 20~~dispersion-compensating fiber 12 is serially linked to the transmission optical fiber 18 via the connector 17.

Please delete the paragraph beginning at page 16, line 11:

~~(Second Embodiment)~~

Please delete the paragraph beginning at page 29, line 14:

~~(Third Embodiment)~~

Please replace the paragraph beginning at page 29, line 21, through page 30, line 2 with the following rewritten paragraph:

This optical transmission system 100 includes a transmission station 110 having a transmitter 111, and a reception station 120 having a receiver 123. The optical transmission system 100 also includes the transmission optical fiber 18 as a transmission line between the transmission station ~~111~~110 and the reception station 120. The reception station 120 includes a Raman amplifier 121 and a dispersion-compensating system 122.

At page 33, after line 16, insert the following paragraph:

Although the invention has been described with respect to a specific embodiment for a complete and clear disclosure, the appended claims are not to be thus limited but are to be construed as embodying all modifications and alternative constructions that may occur to one skilled in the art which fairly fall within the basic teaching herein set forth.